What is claimed is:

1. A method for handoff of a medium rate data call in a mobile communication system, comprising:

the step in which, when the pilot strength of a BTS to which a SCH is allocated is smaller than the pilot strength of the BTS to which the SCH is not allocated among the BTSs in an active set, a mobile station transmits the corresponding information to a base station by a PSMM; and

the step in which the base station performs a handoff of a SCH resource to a BTS to which the SCH is not allocated, according to the PSMM.

2. The method according to claim 1, wherein, in case of a medium rate data service, a FCH handoff procedure and a SCH handoff procedure are separately performed.

3. The method according to claim 1, wherein the SCH handoff is performed with respect to a predetermined number of BTSs having a pilot strength enough to combine pilot signals by the mobile station among the BTSs in an active set.

4. A method for requesting a handoff of a medium rate data call of a mobile station, comprising:

a first step of measuring the pilot strength of a BTS to which a SCH is allocated and the pilot strength of a BTS to which the SCH is not allocated among the BTSs in an active set; and

a second step of transmitting a corresponding information to a base station by means of a PSMM, if the pilot strength of the BTS to which the SCH is allocated is smaller than the pilot strength of the BTS to which the SCH is not allocated as the result of the measurement.

5.   A method for performing a handoff of a medium rate data call of a base station:

a first step of analyzing a PSMM transmitted from a mobile station;

a second step of comparing the pilot strength of a BTS to which a SCH is allocated with the pilot strength of a BTS to which the SCH is not allocated, if the allocation of the SCH is required as the result of the analysis;

a third step of allocating a SCH to the BTS to which the SCH is not allocated and the BTS to which a SCH is allocated, if the pilot strength of the BTS to which the SCH is not allocated is larger than the pilot strength of the BTS to which the SCH is allocated as the result of the comparison, and the pilot strength of the BTS to which the SCH is allocated is more than T_ADD; and

a fourth step of allocating the SCH to a BTS having a largest pilot strength, if all BTSs in the active set are not allocated the SCH, when a DROP of the BTS to which the SCH is allocated is required as the result of the analysis.

6.   The method according to claim 5, wherein, in the thirds step, if the pilot strength of the BTS to which a SCH is not allocated is larger than the pilot strength of the BTS to which a SCH is allocated, and the pilot strength of the BTS to which the SCH is allocated is not more than T_ADD, the allocation of the SCH to the active BTS to which the SCH is not allocated is performed and the release

of the SCH resource from the BTS to which a SCH is allocated is performed.

7.   The method according to claim 5, wherein, as the result of the comparison in the second step, if the pilot strength of the BTS to which a SCH is not allocated is larger than the pilot strength of the BTS to which a SCH is allocated, it is judged that a new pilot signal having a pilot strength larger than the pilot strength of the BTS to which a SCH is allocated is to be added, and if the pilot strength of the BTS of which an ADD handoff is to be performed is more than a reference threshold, a handoff of the SCH is performed by simultaneously allocating both FCH and SCH to the BTS of which an ADD handoff is to be performed.

8.   The method according to claim 7, wherein the reference threshold, e.g., a value which is previously set by a radio environment test, is set higher than T_ADD in case of ADD handoff, and is set higher than T_DROP in case of DROP handoff.

9.   The method according to claim 5, wherein the number of BTSs in the SCH active set is set to less than six in order to prevent an excessive waste of radio resources.